

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (Previously Presented) A reconfigurable pallet system that supports a structure, comprising:

a pallet base;

a plurality of modular stanchions having magnets therein to magnetically attach said modular stanchions to said pallet base along x and y axes relative to a top surface of said pallet base, said modular stanchions each including a support element having a height along a z axis that is transverse to said x and y axes, said support element supporting said structure; and

a pre-form that is selectively attached to said pallet base to define a position of each of said modular stanchions along said x and y axes.

2. (Currently Amended) The reconfigurable pallet system of claim 1 wherein said support element is movable along said z axis to adjust said height.

3. (Currently Amended) The reconfigurable pallet system of claim 2 further comprising a hydraulic pump in fluid communication with a support cylinder and operable to adjust a hydraulic pressure within said support cylinder to move said support element along said z axis.

4. (Currently Amended) The reconfigurable pallet system of claim 1 wherein said modular stanchion further comprises a stanchion base that supports said support element.

5. (Currently Amended) The reconfigurable pallet system of claim 4 wherein said magnets of said stanchion base ~~includes~~ comprise a permanent magnet that is embedded therein and that is selectively moved to a first position to secure said modular stanchion to said pallet base.

6. (Currently Amended) The reconfigurable pallet system of claim 4 wherein said stanchion base includes an electro-magnet embedded therein, wherein a current is selectively applied to said electro-magnet to secure said modular stanchion to said base.

7. (Previously Presented) A pallet system that is configurable to support first structure and reconfigurable to support a second structure, comprising:

a pallet base;

a modular stanchion that is magnetically attachable to said pallet base and positionable along x and y axes relative to a top surface of said pallet base and that includes a support element having a height along a z axis that is transverse to said x and y axes, said support element having a first position to support said first structure and having a second position to support said second structure; and

a pre-form that is selectively attached to said pallet base to define a position of said modular stanchion along said x and y axes.

8. (Currently Amended) The pallet system of claim 7 wherein said support element is movable along said z axis to adjust said height.

9. (Currently Amended) The pallet system of claim 8 further comprising a hydraulic pump in fluid communication with a support cylinder and operable to adjust a hydraulic pressure within said support cylinder to move said support element along said z axis.

10. (Currently Amended) The pallet system of claim 7 wherein said modular stanchion further comprises a stanchion base that supports said support element.

11. (Currently Amended) The pallet system of claim 10 wherein said stanchion base includes a permanent magnet that is movable to a first position to secure said modular stanchion to said pallet base.

12. (Currently Amended) The pallet system of claim 10 wherein said stanchion base includes an electro-magnet embedded therein, wherein a current is selectively applied to said electro-magnet to secure said modular stanchion to said pallet base.

13. (Previously Presented) A reconfigurable pallet system that is configurable to support multiple structures, comprising:

a pallet base;

a modular stanchion that comprises:

a stanchion base that is magnetically attachable to said pallet base along x and y axes relative to a top surface of said pallet base; and

a support element that is supported on said stanchion base and that has a height transverse to said x and y axes along a z axis, said support element having a first position to support a first structure and having a second position to support second structure; and

a pre-form that is selectively attached to said pallet base to define a position of said modular stanchion along said x and y axes.

14. (Currently Amended) The reconfigurable pallet system of claim 13 wherein said support element is movable along said z axis to adjust said height.

15. (Currently Amended) The reconfigurable pallet system of claim 13 further comprising a hydraulic pump in fluid communication with a support cylinder and operable to adjust a hydraulic pressure within said support cylinder to move said support element along said z axis.

16. (Currently Amended) The reconfigurable pallet system of claim 13 wherein said stanchion base includes a permanent magnet that is movable to a first position to secure said modular stanchion to said pallet base.

17. (Currently Amended) The reconfigurable pallet system of claim 13 wherein said stanchion base includes an electro-magnet embedded therein, wherein a current is selectively applied to said electro-magnet to secure said modular stanchion to said pallet base.

18. (Previously Presented) An assembly line for assembling a product, comprising:
a plurality of operation stages; and
a pallet that supports a base structure of said product and that carries said base structure between operation stages, comprising:
a pallet base;
a stanchion base that is magnetically attachable to said pallet base along x and y axes relative to a top surface of said pallet base;
a support element that is supported on said stanchion base and that has a height transverse to said x and y axes along a z axis, said support element locatable in a first position to support said base structure; and
a pre-form that is selectively attached to said pallet base to define a position of said stanchion base along said x and y axes.
19. (Original) The assembly line of claim 18 wherein said support element is movable along said z axis to adjust said height.
20. (Original) The assembly line of claim 19 further comprising a hydraulic pump in fluid communication with a support cylinder and operable to adjust a hydraulic pressure within said support cylinder to move said support element along said z axis.
21. (Original) The assembly line of claim 18 wherein said stanchion base includes a permanent magnet that is movable to a first position to secure said modular stanchion to said pallet base.

22. (Original) The assembly line of claim 18 wherein said stanchion base includes an electro-magnet embedded therein, wherein a current is selectively applied to said electro-magnet to secure said modular stanchion to said pallet base.